

In the Claims

Please amend claims 18 and 21 as follows.

1-17. (Canceled)

18. (Currently amended) A device for determining the presence of a nucleic acid in a sample comprising
an instrument for temperature cycling for analysis of real-time amplification of the nucleic acid,

a fluorimeter for detecting fluorescence during the amplification of the nucleic acid, the fluorescence obtained from a fluorescent entity capable of providing a signal related to the quantity of the nucleic acid, and

a processor for performing analysis routines, wherein the processor is programmed i) to initiate analysis algorithms by inputting into the algorithms fluorescence values measured by the fluorimeter prior to completion of temperature cycling, ii) to initiate a first algorithm to obtain a first score from a first test by inputting into the first algorithm the fluorescence values, iii) to initiate a second algorithm to obtain a second score from a second test by inputting into the second algorithm the fluorescence values, iv) to generate a composite score by evaluating a function that depends on the first score and the second score as independent variables of the function to determine whether the sample is positive or negative for the presence of the nucleic acid, and v) to evaluate the function that depends on the first score and the second score as independent variables of the function to determine whether the sample is indeterminate for the presence of the nucleic acid.

19. (Previously presented) The device of claim 18 wherein the first test is a Confidence Interval Test and the second test is a Signal-to-Noise Ratio Test.

20. (Previously presented) The device of claim 18 wherein the first test is a Channel Consistency Test and the second test is an Efficiency Test.

21. (Currently amended) The device of claim 18 wherein the first test is a Function Ordering Test, the second test is a Maximum to Baseline Comparison Test, and the processor is further programmed to obtain a score from a Last Late Rise Test.

22. (Original) The device of claim 18 wherein the instrument is configured for rapid thermal cycling.

23. (Original) The device of claim 22 wherein the instrument employs capillary tubes and hot air control.

24. (Withdrawn) The device of claim 18 provided in a portable container for field use.

25. (Canceled)

26. (Canceled)